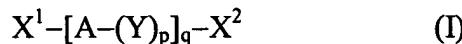
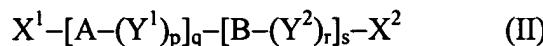


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6. (Twice Amended) The fluorine-containing rubber composition for crosslinking of Claim 2, wherein the fluorine-containing elastomer has a carboxylic acid group at both ends of a trunk chain as a crosslinkable group and is represented by the formula (I):

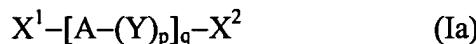


or the formula (II):

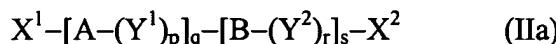


C3
wherein X^1 and X^2 are both a carboxylic acid group, Y, Y^1 and Y^2 are the same or different and each is a divalent organic group having a carboxylic acid group, an alkoxy carbonyl group, an iodine atom or a bromine atom at a side chain thereof, A is an elastomeric fluorine-containing polymer chain segment, B is a non-elastomeric fluorine-containing polymer chain segment, p is 0 or an integer of 1 to 10, q is an integer of 1 to 5, r is 0 or an integer of 1 to 10, s is an integer of 1 to 3, at least one of Y^1 and Y^2 is a divalent organic group having a carboxylic acid group, and Y, Y^1 and Y^2 is optionally contained at random in the segment A or B.

10. (Amended) A fluorine-containing elastomer which has a carboxylic acid group at an end of a trunk chain as a crosslinkable group and is represented by the formula (Ia):



C4
or the formula (IIa):



wherein X^1 and X^2 are both a carboxylic acid group, Y, Y^1 and Y^2 are the same or different and each is a divalent organic group having a carboxylic acid group, an alkoxy carbonyl group, an

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iodine atom or a bromine atom at a side chain thereof, A is an elastomeric fluorine-containing polymer chain segment, B is a non-elastomeric fluorine-containing polymer chain segment, p is 0 or an integer of 1 to 10, q is an integer of 1 to 5, r is 0 or an integer of 1 to 10, s is an integer of 1 to 3, at least one of Y¹ and Y² is a divalent organic group having a carboxylic acid group, and Y, Y¹ and Y² is optionally contained at random in the segment A or B.

12. (Twice Amended) The fluorine-containing elastomer of Claim 10, which satisfies the following equation (1):

$$(S_{CO}/S_{CF}) \times (D/2.03) \times (F/71.6) \leq 0.01 \quad (1)$$

wherein S_{CO}, S_{CF}, D and F represent the following respective values;

S_{CO}: Total area of absorbances at the absorptions derived from carbonyl group of associated and non-associated carboxyl groups having the absorption peaks at from 1,680 to 1,830 cm⁻¹ when measurement is made with FT-IR with respect to the elastomer to be measured;

S_{CF}: Area of absorbance at absorption derived from a harmonic sound of C-F bond having an absorption peak at from 2,220 to 2,840 cm⁻¹ when measurement is made with FT-IR with respect to the elastomer to be measured, and in the case where nitrile group is present, S_{CF} is a value obtained by subtracting an area of absorbance at absorption derived from nitrile group having an absorption peak at from 2,220 to 2,300 cm⁻¹ from a total area of absorbances at whole absorption having a peak at from 2,220 to 2,840 cm⁻¹;

D: Specific gravity of the aimed elastomer at 20°C; and

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CS
F: Fluorine content (% by weight) of the elastomer to be measured obtained by elemental analysis.

18. (Amended) The fluorine-containing elastomer of Claim 11, which satisfies the following equation (1):

$$(Sco/Scf) \times (D/2.03) \times (F/71.6) \leq 0.01 \quad (1)$$

wherein Sco, Scf, D and F represent the following respective values;

Cle
Sco: Total area of absorbances at the absorptions derived from carbonyl group of associated and non-associated carboxyl groups having the absorption peaks at from 1,680 to 1,830 cm^{-1} when measurement is made with FT-IR with respect to the elastomer to be measured;

Scf: Area of absorbance at absorption derived from a harmonic sound of C-F bond having an absorption peak at from 2,220 to 2,840 cm^{-1} when measurement is made with FT-IR with respect to the elastomer to be measured , and in the case where nitrile group is present, Scf is a value obtained by subtracting an area of absorbance at absorption derived from nitrile group having an absorption peak at from 2,220 to 2,300 cm^{-1} from a total area of absorbances at whole absorption having a peak at from 2,220 to 2,840 cm^{-1} ;

D: Specific gravity of the aimed elastomer at 20°C; and

F: Fluorine content (% by weight) of the elastomer to be measured obtained by elemental analysis.